

CLAIMS

The invention is claimed as follows:

1. An information processing system comprising:

a first information processing apparatus managed by a first business entity performing

5 the management of an electronic money brand in an electronic money service and the management of an affiliate business entity in the electronic money service;

first information giving and receiving means for giving and receiving information with a third information processing apparatus managed by a second business entity issuing a second information processing apparatus in which electronic money information and authentication information employed for authentication processing for the electronic money service are recorded;

second information giving and receiving means for giving and receiving information with a fourth information processing apparatus managed by a third business entity providing a service that uses the electronic money;

15 first recording means for recording the authentication information used for the authentication processing for the electronic money service;

second recording means for recording the information regarding the second business entity and the information regarding a tie-up agreement between the first business entity and the second business entity; and

20 third recording means for recording the information regarding the third business entity and the information regarding a tie-up agreement between the first business entity and the third business entity.

2. An information processing system according to Claim 1, wherein

the first information giving and receiving means outputs the authentication information recorded by the second recording means on the basis of the information regarding the tie-up agreement between the first business entity and the second business entity that has been recorded by the second recording means, and

5 the second information giving and receiving means outputs the authentication information recorded by the first recording means on the basis of the information regarding the tie-up agreement between the first business entity and the third business entity that has been recorded by the third recording means.

3. An information processing system according to Claim 1, further comprising first accounting means for carrying out accounting with the second business entity, and second accounting means for carrying out accounting with the third business entity.

4. An information processing system according to Claim 1, further comprising authenticating means for carrying out authentication processing using the authentication information recorded by the first recording means,

wherein the authenticating means carries out authentication processing by using the authentication information associated with the third business entity recorded by the first recording means when a signal requesting the implementation of authentication processing is received from the third business entity by the second information giving and receiving means.

5. An information processing system according to Claim 1, further comprising:
third information giving and receiving means for giving and receiving information, through a network, with a fifth information processing apparatus that rewrites the electronic money information recorded in the second information processing apparatus; and

generating means for generating a control signal causing the fifth information processing apparatus to carry out the loading of electronic money into the second information processing apparatus,

wherein the generating means generates the control signal for the second information processing apparatus, which has been issued by the second business entity, on the basis of information regarding the tie-up agreement between the first business entity and the second business entity that has been recorded by the second recording means, and

the third information giving and receiving means outputs the control signal generated by the generating means to the fifth information processing apparatus.

6. An information processing system according to Claim 1, wherein the network is the Internet, and

the third information giving and receiving means further exchanges information with a sixth information processing apparatus managed by the third business entity having a virtual store on the Internet.

7. An information processing method for a first information processing apparatus managed by a first business entity that performs the management of an electronic service brand and the management of an electronic money service affiliate business entity, comprising:

a first information giving and receiving step for giving and receiving information with a second information processing apparatus managed by a second business entity issuing a portable electronic device in which electronic money information and authentication information used for authentication processing related to the electronic money service are recorded;

a second information giving and receiving step for giving and receiving information with a third information processing apparatus managed by a third business entity providing a service that uses the electronic money;

a first recording step for recording the authentication information used for authentication processing related to the electronic money service;

a second recording step for recording information regarding the second business entity and information regarding a tie-up agreement between the first business entity and the second business entity; and

a third recording step for recording information regarding the third business entity and information regarding a tie-up agreement between the first business entity and the third business entity,

wherein, in the first information giving and receiving step, the authentication information, which has been recorded by the processing of the first recording step, is output on the basis of the information regarding the tie-up agreement between the first business entity and the second business entity that has been recorded by the processing of the second recording step, and

in the second information giving and receiving step, the authentication information, which has been recorded by the processing of the first recording step, is output on the basis of the information regarding the tie-up agreement between the first business entity and the third business entity that has been recorded by the processing of the third recording step.

8. A recording medium in which a computer-readable program for a first information processing apparatus managed by a first business entity that manages an electronic money brand in an electronic money service, and acquires and manages an affiliate business entity of the electronic money service has been recorded, the program comprising:

a first information giving and receiving step for giving and receiving information with a third information processing apparatus managed by a second business entity issuing a second information processing apparatus in which electronic money information and authentication information used for authentication processing related to the electronic money service are recorded;

a second information giving and receiving step for giving and receiving information with a fourth information processing apparatus managed by a third business entity providing a service that uses the electronic money;

a first recording step for recording the authentication information used for authentication processing related to the electronic money service;

a second recording step for recording information regarding the second business entity and information regarding a tie-up agreement between the first business entity and the second business entity; and

a third recording step for recording information regarding the third business entity and information regarding a tie-up agreement between the first business entity and the third business entity,

wherein, in the first information giving and receiving step, the authentication information, which has been recorded by the processing of the first recording step, is output on the basis of the information regarding the tie-up agreement between the first business entity and the second business entity that has been recorded by the processing of the second recording step, and

in the second information giving and receiving step, the authentication information, which has been recorded by the processing of the first recording step, is output on the basis of the information regarding the tie-up agreement between the first business entity and the third business entity that has been recorded by the processing of the third recording step.

9. An electronic money service providing system comprising:

a first information processing apparatus managed by a first business entity that manages an electronic money brand in an electronic money service, and acquires and manages an

5 affiliate business entity of the electronic money service;

a second information processing apparatus in which electronic money information and authentication information used for authentication processing for the electronic money service are recorded;

a third information processing apparatus managed by a second business entity issuing the second information processing apparatus; and

a fourth information processing apparatus managed by a third business entity providing a service that uses the electronic money;

wherein the first information processing apparatus comprises:

15 first information giving and receiving means for giving and receiving information with the third information processing apparatus managed by the second business entity;

second information giving and receiving means for giving and receiving information with the fourth information processing apparatus managed by the third business entity;

first recording means for recording the authentication information used for the authentication processing for the electronic money service;

20 second recording means for recording the information regarding the second business entity and the information regarding a tie-up agreement between the first business entity and the second business entity; and

third recording means for recording the information regarding the third business entity and the information regarding a tie-up agreement between the first business entity and the third
25 business entity,

the first information giving and receiving means outputs the authentication information, which has been recorded by the first recording means, on the basis of the information regarding a tie-up agreement between the first business entity and the second business entity that has been recorded by the second recording means,

5 the second information giving and receiving means outputs the authentication information, which has been recorded by the first recording means, on the basis of the information regarding a tie-up agreement between the first business entity and the third business entity that has been recorded by the third recording means,

the second information processing apparatus comprises:

fourth recording means for recording the authentication information output to the third information processing apparatus by the first information giving and receiving means; and

fifth recording means for recording the electronic money information,

the third information processing apparatus comprises:

15 third information giving and receiving means for giving and receiving information with the first information processing apparatus;

sixth recording means for recording the authentication information input by the third information giving and receiving means;

seventh recording means for recording information regarding the issuance of the second information processing apparatus; and

20 first authentication processing means for implementing authentication processing with the second information processing apparatus on the basis of the authentication information recorded by the sixth recording means, and

the fourth information processing apparatus comprises:

25 fourth information giving and receiving means for giving and receiving information with the first information processing apparatus;

eighth recording means for recording the authentication information input by the fourth information giving and receiving means; and

second authentication processing means for implementing authentication processing with the second information processing apparatus on the basis of the authentication information recorded by the eighth recording means.

10. An electronic money service providing system according to Claim 9, wherein the third information processing apparatus further comprises fifth information giving and receiving means for giving and receiving information with a plurality of fifth information processing apparatuses that carry out processing for rewriting the electronic money information recorded by the fifth recording means of the second information processing apparatus, and

the first authenticating means carries out authentication processing on the basis of the authentication information that has been input by the fifth information giving and receiving means and recorded by the fourth recording means of the second information processing apparatus.

11. An electronic money service providing system according to Claim 9, wherein the fourth information processing apparatus further comprises fifth information giving and receiving means for giving and receiving information with a plurality of fifth information processing apparatuses that carry out processing for rewriting the electronic money information recorded by the fifth recording means of the second information processing apparatus, and

the second authenticating means carries out authentication processing on the basis of the authentication information that has been input by the fifth information giving and receiving means and recorded by the fourth recording means of the second information processing apparatus.

12. An electronic money service providing system according to Claim 9, wherein the fourth information processing apparatus further comprises:

fifth information giving and receiving means for giving and receiving information with the second information processing apparatus; and

generating means for generating a control signal for rewriting the electronic money information recorded by the fifth recording means of the second information processing apparatus, and

the second authenticating means for carrying out authentication processing on the basis of the authentication information that has been input by the fifth information giving and receiving means and recorded by the fourth recording means of the second information processing apparatus.

13. An electronic money service providing system according to Claim 9, wherein the second information processing apparatus further comprises ninth recording means for recording an application for implementing at least one function among a personal authentication card, an entering and leaving key, a commuter ticket, a point card, a membership card, a cash card, a credit card, and a loan card.

14. An electronic money service providing system according to Claim 9, wherein the second information processing apparatus is an IC card, a portable telephone, an information processing terminal, a personal computer, or a timepiece.